From the INTERNATIONAL SEARCHING AUTHORITY

To:

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WITHERS & ROGERS

Attn. Bannerman, David G.

Goldings House

2 Hays Lane

London SE1 2HW UNITED KINGDOM

OUT SHEET OF THE SERVICE OF THE SERV NOTIFICATION OF THANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

UGUETTE U	Date of mailing (day/month/year) 16/12/2003
Applicant's or agent's file reference	
KB523PCT/DGB	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No.	International filing date
PCT/EP 03/07333	(day/month/year) 08/07/2003
Applicant	
KARO BIO AB	

1. X	The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.
	Filing of amendments and statement under Article 19:
	The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):
	When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the international Search Report; however, for more details, see the notes on the accompanying sheet.
	Where? Directly to the International Bureau of WIPO
	34, chemin des Colombettes
	1211 Geneva 20, Switzerland
	Fascimile No.: (41–22) 740.14.35
	For more detailed instructions, see the notes on the accompanying sheet.
<u> </u>	7. The sealing the house wall and the house lateral News Property ill he catabilities and the title designation under
2.	The applicant is hereby notified that no International Search Report will be established and that the declaration under
	Article 17(2)(a) to that effect is transmitted herewith.
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3	With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
	The state of the s
l	the protest together with the decision thereon has been transmitted to the international Bureau together with the
Į.	applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
l	
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l	no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
ا	urther action(s): The applicant is reminded of the following:
4. Ft	urther action(s): The applicant is reminded of the following:
l sı	nortly after 18 months from the priority date, the international application will be published by the International Bureau.
	If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the
	priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the
	completion of the technical preparations for International publication.
1	property of the common
l w	ithin 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant
	wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).
W	ithin 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase
	before all designated Offices which have not been elected in the demand or in a later election within 19 months from the
	priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the international Searching Authority

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Authorized officer

Chantal Meyer

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

#### **INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19**

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international politication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been is filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

Notes to Form PCT/ISA/220 (first sheet) (January 1994)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged:
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

# The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
  "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
  claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
   "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
   "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

#### "Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

#### Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

#### Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guida

# PATENT COOPERATION TREATY





## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	(Form PCT/ISA/220) as well as, where applicable, item 5 below.					
KB523PCT/DGB	ACTION					
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/EP 03/07333	08/07/2003	10/07/2002				
Applicant		•				
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KARO BIO AB						
according to Article 18. A copy is being to  This International Search Report consists	s of a total of sheets.					
X It is also accompanied by	a copy of each prior art document cited in this	s report.				
1. Basis of the report	international search was carried out on the ba	asis of the international application in the				
language in which it was filed, ur	eless otherwise indicated under this item.	asis of the international approach in the				
the international search v Authority (Rule 23.1(b)).	was carried out on the basis of a translation of	the international application furnished to this				
b. With regard to any nucleotide a was carried out on the basis of the		international application, the international search				
	onal application in written form.					
filed together with the int	emational application in computer readable for	rm.				
furnished subsequently t	to this Authority in written form.					
furnished subsequently t	to this Authority in computer readble form.					
the statement that the su international application	as filed has been furnished.	does not go beyond the disclosure in the				
the statement that the in furnished	formation recorded in computer readable form	is identical to the written sequence listing has been				
2. X Certain claims were fo	und unsearchable (See Box I).					
3. Unity of Invention is la	cking (see Box II).					
4. With regard to the title,						
the text is approved as s	submitted by the applicant.					
X the text has been established by this Authority to read as follows:						
BENZAMIDE OR PHENYLAC	ETAMIDE DERIVATIVES USEFUL	AS THYROID RECEPTOR LIGANDS				
5. With regard to the abstract,						
the text has been estab	submitted by the applicant. lished, according to Rule 38.2(b), by this Autho he date of mailing of this international search r	ority as It appears in Box III. The applicant may, report, submit comments to this Authority.				
	ablished with the abstract is Figure No.					
as suggested by the ap		None of the figures.				
	alled to suggest a figure.	<del>-</del>				
_	er characterizes the Invention.					

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sneet)
This inte	rnational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
	Although claims 13-21 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition which have been searched.
2. X	Claims Nos.: 1,2,5-12,22-30 all partially because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
	see FURTHER INFORMATION sheet PCT/ISA/210
з. 📗	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This into	ernational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Rema	The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

### INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
POST 03/07333

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 0194293	Α	13-12-2001	AU	6813201 A	17-12-2001
			CA	2411062 A1	13-12-2001
			EP	1292568 A2	19-03-2003
			WO	0194293 A2	13-12-2001
			ÜS	6395784 B1	28-05-2002
WO 0039077	Α	06-07-2000	 AU	758202 B2	20-03-2003
			ΑU	1885500 A	31-07-2000
			BR	9916851 A	16-10-2001
			CA	2356319 A1	06-07-2000
			CN	1337953 T	27-02-2002
			CZ	20012204 A3	14-11-2001
			ΕP	1144370 A2	17-10-2001
			HU	0104666 A2	28-03-2002
			WO	0039077 A2	06-07-2000
			JP	2002533432 T	08-10-2002
			NO	20012931 A	21-08-2001
			TR	200101834 T2	21-12-2001
WO 02094319	Α	28-11-2002	WO	02094319 A1	28-11-2002

#### INTERNATIONAL SEARCH REPORT

International Application No

PC

P 03/07333

A. CLASSIFICATION OF SUBJECT MA IPC 7 C07C235/52 C07C235/34 A61K31/195 A61P5/16

According to International Patent Classification (IPC) or to both national classification and IPC

#### **B. FIELDS SEARCHED**

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{C07C} & \mbox{A61K} \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 94293 A (SQUIBB BRISTOL MYERS CO;RYONO DENIS E (US)) 13 December 2001 (2001-12-13) the whole document	1,2, 5-12, 22-30
X	WO 00 39077 A (GARG NEERAJ ;LI YI LIN (SE); KAROBIO AB (SE); KOEHLER KONRAD (SE);) 6 July 2000 (2000-07-06) the whole document	1,2, 5-12, 22-30
P,X	WO 02 094319 A (HAYASHI MORIMICHI ;KISSEI PHARMACEUTICAL (JP); NISHIMURA TOSHIHIRO) 28 November 2002 (2002-11-28) abstract; pages 18-25; claims	1,2, 5-12, 22-30
	-/	

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:  A* document defining the general state of the art which is not considered to be of particular relevance  E* earlier document but published on or after the international filling date  L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O* document referring to an oral disclosure, use, exhibition or other means  P* document published prior to the international filling date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family
Date of the actual completion of the International search  1 December 2003	Date of mailing of the international search report  16/12/2003
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Rufet, J

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# INTERNATIONAL SEARCH REPORT

International Application No PC 03/07333

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Category ° Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
CHEMICAL ABSTRACTS, vol. 57, no. 7, 1 October 1962 (1962-10-01) Columbus, Ohio, US; abstract no. 8493g, JEAN ROCHE ET AL.: "Synthesis of new derivatives of iodothyroacetic acid, the iodothyroacetlglycines." page 8493; column 1; XP002263402 abstract & BULL. SOC. CHIM. FRANCE, 1959, pages 1547-1550,	1,2, 5-12, 22-30
· :	
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#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1,2,5-12,22-30 all partially

Present claims 1, 2, 5-12, 22-30 relate to an extremely large number of possible compounds/compositions/uses. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds/products/apparatus/methods claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds according to formula (I) of claim 1 wherein:

R3 is hydrogen, X is 0, R13 is COOH, R7 is H and R10 is H, halogen phenyl or an alkyl group, the other substituents are defined according to the corresponding definitions given in claim 1 whereby expressions like "alkyl, aroyl, alkanaoyl, aryl, ester thereof, carboxylic acid surrogates known in the art, heteroaryl, arylakyl, heteroarylalkyl, etc... " have not been considered, as far as they have been supported by examples, since those expressions are speculative and it is not reasonable to predict that all variants covered by such expressions have the alleged effect. It is stressed that the compounds of claims 3 and 4 are not comprised by the scope of claim 1 due to the proviso concerning R2, R4, R8 and R9.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.